



## PATENT ABSTRACTS OF JAPAN

(11) Publication number **2001255508 A**(43) Date of publication of application **21.09.01**(51) Int. Cl. **G02F 1/133**(21) Application number **2000069589**(22) Date of filing **14.03.00**(71) Applicant: **SHARP CORP**

(72) Inventor  
**KABE MASAOKI**  
**TAGAWA AKIRA**  
**FURUKAWA TOMOAKI**  
**ITO NOBUYUKI**  
**NUMAO KOJI**

(54) **LIQUID CRYSTAL DISPLAY DEVICE**

as at the pixel cells Ca, Cb.

(57) Abstract:

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**PROBLEM TO BE SOLVED:** To provide a liquid crystal display device for displaying a uniform gradation level in the pixels, corresponding to each gate line when a backlight is turned on, in contrast to the case of not completely ending the response of the liquid crystal.

**SOLUTION:** A liquid crystal display element is provided with n gate lines and m data lines and comprises pixel cells which are arranged in a matrix form, corresponding to the intersections of the gate lines and data lines. In a liquid crystal display device, which is provided with the liquid crystal display element and where a selection signal to the a-th gate line to be scanned (a is an integer where  $1 \leq a \leq n$ ) is applied at a time  $t_a$ , and a selection signal to the b-th gate line (b is an integer,  $b \neq a$  and  $1 \leq b \leq n$ ) is applied at a time  $t_b$ , and backlight made incident on a pixel cell Ca corresponding to the a-th gate line and a pixel cell Cb, corresponding to the b-th gate line, is turned on and off almost simultaneously, a voltage level regulating means is provided for adjusting the voltage levels to be applied to the pixel cells Ca, Cb, so as to obtain almost the same level of luminance

